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IN THE MATTER OF U S WEST
COMMUNICATIONS, INC.'S
COMPLIANCE WITH SECTION 271 OF
THE TELECOMMUNICATIONS ACT
OF 1996

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) DOCKET NO. T-00000A-97-0238
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Arizona Corporation Commission

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**COVAD COMMUNICATIONS COMPANY'S AND RHYTHMS LINKS INC.'S
JOINT BRIEF ON PACKET SWITCHING AND LINE SHARING IMPASSE
ISSUES**

Covad Communications Company ("Covad") and Rhythms Links Inc.
("Rhythms") respectfully submit this joint brief on the packet switching and line sharing
impasse issues:

I. PRELIMINARY STATEMENT

Throughout the emerging services workshops, Qwest Corporation ("Qwest")
assiduously refused to amend its SGAT to take pro-competitive, pro-entry positions in
several key areas. Indeed, even after a thorough development of the record on these
issues, Qwest continued to limit unlawfully CLECs' access to critical packet switching
technology and line sharing, as well as to engage in other prohibited practices.

Qwest's SGAT, and the positions it took in the workshops, belie Qwest's supposed "pro-competitive" commitments. Remote terminal access both within and outside Qwest's territory is one of the most important issues facing the competitive, emerging services industry. If this Commission accepts Qwest's proposals at face-value, entire neighborhoods throughout Arizona will be walled off to competitive entry.

Qwest's ability to wall off entire neighborhoods and cities could have a wide-ranging impact beyond Arizona. As this Commission is well aware, Qwest is providing competitive, xDSL services outside its incumbent LEC territory. Currently, in both the Verizon and SBC regions, Qwest will be able to provide DSL services to neighborhoods served by Next-Generation Digital Loop Carriers ("NGDLC") because of various legal requirements. Yet, at the same time it takes advantage of the Verizon and SBC obligations, Qwest denies CLECs comparable methods of access in its own incumbent region.

Equally indicative of Qwest's refusal to foster a competitive xDSL market in Arizona is its refusal to take the steps necessary to effectively implement line sharing. Despite the fact that the Federal Communications Commission (the "FCC") ordered incumbent LECs to provision line shared loops over one year ago, Qwest continues to impede the deployment of line sharing by CLECs.

It is important that this Commission (and other state commissions in Qwest's territory) nip this competitive disparity in the bud. Until Qwest resolves these deficiencies, this Commission should not approve Qwest's § 271 application.

II. ARGUMENT: PACKET SWITCHING

A. Background: The Economics Of NGDLC Technology And Legal Framework.

From a business and competitive perspective, fiber-fed loops, including loops comprised of digital loop carrier facilities (often called next-generation digital loop carrier, or "NGDLC") or loops served by a remote DSLAM (i.e., remote line card shelf DSLAMs), increase the DSL bandwidth available to end-users supported by that system. NGDLC-type architecture, which includes both NGDLC and/or remote DSLAMs, both shortens the length of the copper loop serving a particular customer and takes advantage of advances in fiber optic technology to connect neighborhood nodes or "gateways" to metropolitan-area optical networks. NGDLC-type systems typically support the provision of both analog voice and advanced data services.

As a result, in the deployment of an NGDLC-type network or in a network served by a remote DSLAM, an incumbent LEC has the advantages of economies of scale, scope and density that new, competitive entrants do not possess.¹ In particular, when an incumbent LEC deploys an NGDLC or an NGDLC functionality (i.e., a remote DSLAM) in a neighborhood where it already has a substantial share of voice subscribers, it will immediately realize the cost-savings of scale and density from that architecture and it will be able to immediately "bundle" the sale of advanced data services to its large voice customer base.²

¹ An incumbent achieves an "economy of scale" when it is less expensive to provide service to multiple customers over an architecture than to a single customer. An incumbent achieves an "economy of scope" when it is less expensive to sell a customer several products simultaneously than to sell that customer each product individually. Finally, an incumbent is able to achieve an "economy of density" when it is able to deploy a single network in a neighborhood that serves a number of end-users, rather than deploying or developing a separate network connection for each end-user.

² The cost savings of an NGDLC architecture are demonstrated in Project Pronto press releases.

In contrast, CLECs like Covad or Rhythms face an entirely different set of choices. Without the luxury of an existing local voice base or existing ubiquitous copper loop plant, a CLEC's ability and incentive to deploy profitably an NGDLC-type architecture or NGDLC functionality is substantially lower than the incumbent LECs.³ Consequently, the ability of CLECs to provide advanced services to entire sets of customers will be impaired dramatically.

A public policy that simply says, "all carriers can deploy NGDLC" or "all carriers can deploy NGDLC functionalities" (via a remote DSLAM), and nothing else, dramatically underestimates the inherent advantages and economies incumbent LECs like Qwest possess. Fortunately, it was precisely for situations like these that the Telecommunication Act of 1996's (the "Act") unbundling principles were designed to address.⁴

1. The Commission's Authority under Section 251(d)(3) and FCC Rule 51.317.

Even if FCC Rule 51.319 does not mandate unbundled access to packet-switched NGDLC architectures and NGDLC functionalities, like remote DSLAMs, as requested by Covad,⁵ the Commission has the authority, under the Act⁶ and FCC rules⁷, to expand Qwest's unbundling obligations beyond the minimal national requirements of the FCC. Section 251(d)(3) of the Act explicitly authorizes state commissions to establish additional unbundling obligations. While the FCC in the *First Report and Order* established the basic list of UNEs that must be unbundled by all ILECs, the FCC

³ CLECs are often faced with the "if I build it, will they come?" decision that incumbents do not face. Because Qwest retains an overwhelming dominance in the local exchange market, it knows that if it deploys NGDLC technology, it will be able to cut-over its captive voice customers and immediately begin to see a return on that investment. A CLEC with zero market share does not have that guaranteed return.

⁴ See, e.g., *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, FCC 96-325, ¶ 242 (1996) ("*First Report and Order*").

⁵ See Section II.A below.

⁶ 47 U.S.C § 251(d)(3).

emphasized that “section 251(d)(3) grants state commissions the authority to impose additional obligations upon incumbent LECs beyond those imposed by the national list.”⁸

It is clear that the FCC did not intend the *UNE Remand Order* to be the “final word” on remote terminal access, as Qwest apparently contends. To the contrary, the FCC explicitly encouraged states “to impose additional, pro-competitive requirements consistent with the national framework established in this order.”⁹ The FCC thus specifically deferred to state commissions to resolve technical issues related to subloop unbundling.¹⁰ Implicit within that deferral, therefore, is the recognition that states, like Arizona¹¹, are particularly well suited to take the steps necessary to ensure that remote terminal access be provided in a manner that encourages competition:

It is impossible to predict every deployment scenario or the difficulties that might arise in the provision of the high frequency loop spectrum network elements. States may take action to promote our overarching policies, where it is consistent with the rules established in this proceeding. We believe this approach will permit the states to benefit from the informed debate on the record in this proceeding, and will promote consistency in federal and state regulations.¹²

As a nascent and developing market, regulation of advanced services, including remote terminal access, must rapidly adapt to keep pace with changing market conditions.

The FCC explains:

[o]ver time, we expect carriers to develop new technologies to support new forms of telecommunications services. Consistent with our rules and our obligation to promote innovation, investment, and competition among all participants and for all services in the telecommunications marketplace, we expect incumbent LECs to

⁷ 47 C.F.R § 51.317(d).

⁸ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order, 15 FCC Rcd. 3696, ¶ 154 (1999) (“*UNE Remand Order*”).

⁹ *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Third Report and Order, 14 FCC Rcd. 20912, at ¶ 159 (1999) (“*Line Sharing Order*”).

¹⁰ *UNE Remand Order*, ¶ 224.

¹¹ In addition, the FCC has initiated a rulemaking proceeding to specifically address ILEC unbundling obligations over next-generation digital loop carrier systems.

¹² *Line Sharing Order* at ¶ 225.

provide access to the features, functionalities, and capabilities associated with the unbundled network elements necessary to provide such services.¹³

Pursuant to this FCC policy, state commissions in Illinois, Pennsylvania, Maryland, Texas, New York and Kansas all have either ordered unbundled access to NGDLC architectures and/or functionalities like remote DSLAMs, or are currently considering taking such steps. Arizona should join that group, and require that Qwest provide CLECs with access to any NGDLC or NGDLC functionality, including remote DSLAMs, deployed in its network.

B. This Commission Should Require Qwest To Provide Access To Packet-Switched NGDLC Architectures and NGDLC Functionalities, Including Remote DSLAMs (SGAT § 9.20.2.1-9.20.2.4; AIL PS1, PS3, PS4 and PS6).

Qwest's proposed SGAT language in Section 9.20.2 is insufficient to provide Arizona consumers and businesses a competitive choice of broadband DSL services. In particular, Qwest has refused to provide unbundled access to packet-switched NGDLC architectures. Qwest only agrees to provide unbundled access to packet-switched NGDLC in the following circumstances:

9.20.2.1 CLEC may obtain unbundled packet switching only when all four of the following conditions are satisfied in a specific geographic area:

9.20.2.1.1 Qwest has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section.

9.20.2.1.2 There are no spare copper loops available capable of supporting the xDSL services the requesting carrier seeks to offer.

¹³ *Deployment of Wireline Services Offering Advanced Telecommunications Capability, and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket Nos. 98-147 and 96-98, Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, and Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 01-26, ¶ 24 (Rel. January 19, 2001) ("*Line Sharing Reconsideration Order*").

9.20.2.1.3 Qwest has placed a DSLAM for its own use in a remote Qwest Premises but has not permitted CLEC to collocate its own DSLAM at the same remote Qwest Premises or collocating a CLEC's DSLAM at the same Qwest Premises will not be capable of supporting xDSL services at parity with the services that can be offered through Qwest's Unbundled Packet Switching.

9.20.2.1.4 Qwest has deployed packet switching capability for its own use.

In its Comments and through testimony introduced into evidence at the workshop, Covad (as well as other CLECs) proposed that Qwest make "virtual collocation and unbundled packet-switching" available to CLECs that desire to provide services over NGDLC platforms or via remote DSLAMs. Specifically, Covad proposed that Qwest provide remote terminal access via "plug and play" – the insertion of a plug-in card-based DSLAM functionality.¹⁴ Qwest refused to modify its SGAT language on the grounds that purportedly alternative access could be obtained by a CLEC who (1) remote deployed a DSLAM; (2) leased fiber transport from the CO to the remote terminal, and (3) leased a copper loop to the end user.¹⁵ For the reasons set forth below, Qwest's proposal is untenable and will effectively stymie competition in Arizona. Covad and Rhythms therefore request that this Commission order Qwest to provide the access requested on an unbundled basis.

1. The "Impair" Standard.

FCC Rule 51.317 prescribes the legal standard to be used by state commissions when creating new UNEs. When no proprietary rights are implicated, as in this case, the

¹⁴ TR 842, 15-25; 843, 1-25; 844, 1-25 (Zulevic). Covad developed its virtual collocation NGDLC proposal initially in response to SBC's planned Project Pronto and the September 2000 waiver SBC obtained from its Ameritech merger conditions relating to Pronto access. Since the FCC Bell Atlantic/GTE merger conditions imposed identical restrictions and conditions upon Verizon, and in the context of New York, Maryland and Pennsylvania state unbundling inquiries, Verizon recently proposed a similar product called "PARTS" (Packet-Switched Access to Remote Terminal Service").

¹⁵ See generally, TR 842-848 (Zulevic); see also Rebuttal Affidavit of Karen A. Stewart, Aug. 30, 2000, pp. 30-31 ("Stewart Reb.").

state commission need only find that CLECs would be “impaired” without access to the element.

When evaluating whether to unbundle a network element under the “impair” standard, the rules establish that the “totality of circumstances” must be considered to determine whether an alternative to the ILEC’s network is available in such a manner that a requesting carrier can realistically be expected to actually provide services using the alternative.¹⁶

To determine whether the totality of the circumstances warrants unbundled access, Rule 51.317(b) requires that the state commission consider the cost, timeliness, quality, ubiquity, and impact on network operations that may be associated with any alternatives to unbundling. In addition, a state commission may consider other factors such as promotion of the rapid introduction of competition; facilities-based competition, investment, and innovation; or certainty to requesting carriers regarding the availability of the element.¹⁷

As Covad pointed out in its Comments and testimony,¹⁸ no commercially viable alternative method to providing service to neighborhoods served by NGDLC or NGDLC functionalities, like remote DSLAMs, exists absent unbundled access, for the following reasons:

a. Availability of Spare Copper (Section 9.20.2.1.2) is not a Viable Alternative.

The use of spare or “home run” copper loops to provision xDSL service is far from being a feasible alternative. In many cases, an NGDLC or remote DSLAM is deployed precisely because available copper is not suited (e.g., too long) for xDSL

¹⁶ *UNE Remand Order* at ¶ 62.

¹⁷ See 47 C.F.R. § 51.317(c).

service. In addition, because the length of the copper loop limits the xDSL bandwidth available to the end-user, CLECs would be at a considerable competitive disadvantage to Qwest's deployment if CLECs were required to provide service on spare loops. For example, while Qwest might be able to provide high-bandwidth VDSL service through a RT architecture (where the copper distribution subloop may only be 2000-3000 feet long), a CLEC offering service over a longer, spare copper loop may only be able to provide ADSL service. Thus, Qwest's requirement that CLECs go to "spare copper loops" first would give it an inherent and sustainable competitive advantage for its own DSL services. The consequent competitive disadvantage to CLECs could be significant enough to deter them from even attempting to provide a competitive, alternative service in many neighborhoods and towns.

In addition, fiber fed NGDLC systems with a plug-in card based DSLAM functionality at the remote terminal potentially cause cross talk interference problems with DSL provided over spare copper loops to DSLAMs collocated in the central office. Such degradation could materially diminish a competitor's ability to effectively provide service. During the hearing on this issue before the Illinois Commerce Commission, Ameritech's witness acknowledged that there could be a degradation in throughput because of SBC's Project Pronto's deployed architecture.¹⁹

Although Qwest may argue that SGAT § 9.20.2.1 is derived from its rough FCC Rule analogue 51.319(c)(3)(B), the FCC has since recognized the inherent flaws in Qwest's position. In granting SBC a waiver from its merger conditions with regard to Project Pronto, the FCC interpreted 51.319(c)(3)(B)(ii) as permitting a competitor to "be able to provide over the spare copper *the same level of quality advanced services* to its

¹⁸ See also TR 683, 8-25; 684, 1-25; 685, 1-4; 842, 15-25; 843, 1-25; 844, 1-25; 845, 1-25; 846, 1-25; 847, 1-25; 848, 1-25 and 849, 1-13 (Zulevic).

customer as the incumbent LEC.”²⁰ In addition, Section 51.319(c)(3)(B)(ii) requires that, to be deemed an alternative to unbundled packet-switching, the spare copper must be able to “support[] the xDSL services the requesting carrier seeks to offer.” Therefore, the Commission should clarify that, if a CLEC seeks to offer VDSL or high-rate ADSL service to a customer, and existing spare copper does not support that xDSL service, or that DSL provided over NGDLC by Qwest would potentially degrade CLEC services over spare copper loops, the “spare copper” exclusion to the packet-switching element of SGAT § 9.20.2.1.3 does not apply.

b. Collocation of DSLAMs (SGAT § 9.20.2.1.3) is not a Viable Alternative.

Collocating DSLAMs in Qwest’s remote terminal is not an alternative that should be given any weight whatsoever under the impair analysis. In general terms, collocating DSLAMs as an alternative requires CLECs to collocate the equipment necessary to perform the DSLAM and multiplexing functionality along with optical electronics in every Qwest remote terminal served by fiber. In addition, CLECs will need to make all the necessary cross connections and install Field Connection Points (“FCPs”) at each remote terminal between the end user’s copper and its collocated equipment. When examining the burden imposed by the requirement of collocating a DSLAM in a remote terminal pursuant to the factors set forth in Rule 51.317, it is demonstrably apparent that unbundled access to any NGDLC or remote DSLAM in Qwest’s network is required.

First, no CLEC is in the financial position to replicate the Qwest network and collocate DSLAMs at a sufficient number of remote terminals to offer a viable

¹⁹ *Id.* See Post-Hearing Rebuttal Testimony of Gentry, Exhibit C at 23.

²⁰ *In the Matter of Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, CC Docket No. 00-217, Memorandum Opinion and Order, FCC 01-29 (January 22, 2001) footnote 741.

competitive service. The FCC has stated that where lack of access to a UNE “materially restricts the number or geographic scope of the customers,” a CLEC’s ability to provide services is impaired.²¹ The purpose of unbundled access is to permit CLECs to share the economies of scale, scope and density of existing incumbent LEC networks. Qwest enjoys considerable economies in deploying NGDLC architectures and remote DSLAMs that CLECs do not possess, which poses a considerable and sustainable competitive problem. Those economies derive from the ubiquitous nature of Qwest’s incumbent LEC network – a level of ubiquity no CLEC possesses. Thus, in determining whether to order unbundled access, this Commission must consider whether an ubiquitous alternative can be deployed on a timely and cost-effective basis. With regard to NGDLC architectures and functionalities, only Qwest possesses such economies.

Second, the findings of the FCC illustrate that collocation of DSLAMs in Qwest’s remote terminals is far more costly than accessing NGDLC loops from the central office.²²

Third, collocating DSLAMs in Qwest’s remote terminals would materially delay a requesting carrier’s timely entry into the local market or alternatively delay expansion of an existing carrier’s line sharing service offerings.²³ In fact, the FCC recognizes that collocation of a DSLAM in a remote terminal is an inherently time consuming process.²⁴ Further delays would be incurred while the CLEC attempted to secure necessary access to rights-of-way, zoning, and power supply that may be needed in certain instances.²⁵

²¹ *UNE Remand Order* at ¶ 97.

²² *Line Sharing Reconsideration Order* at ¶ 13.

²³ *See also UNE Remand Order* at ¶ 361.

²⁴ *Line Sharing Reconsideration Order* at ¶ 13.

²⁵ *See UNE Remand Order* at ¶¶ 213 and 364. In addition, Qwest’s Rights of Way Agreement also threatens to remove the Commission’s oversight on Qwest’s management of rights of way disputes. Qwest has proposed mandatory alternative dispute resolution to resolve such disputes. The results of those proceedings may never become public—which means that this Commission may never know how or why a CLEC may not have been able to obtain rights of way to serve a particular town or neighborhood.

Finally, the other factors provided for by Rule 51.317(c) support unbundled access.²⁶ For instance, the unbundling requested by Covad and Rhythms (1) promotes the rapid introduction of competition for advanced services in the residential and small business marketplace; (2) promotes facilities-based competition, investment, and innovation for new innovative xDSL services that can be offered to customers; and (3) ensures the certainty requesting carriers require to provide advanced services ubiquitously throughout Arizona.

2. Collocation of DSL Line Cards at Remote Terminals.

A critical component of Covad's proposed unbundled access to Qwest packet-switched NGDLC functionality is the ability to virtually collocate DSL line cards at Qwest remote terminals.²⁷ Qwest refused to agree to Covad's proposal.

Any Commission decision ordering unbundled access to NGDLC-type packet-switching must be accompanied by a decision explicitly permitting the collocation of DSL line cards. The line card performs the DSLAM functionality necessary to generate and receive transmissions across the unbundled loop from the end-user through the remote terminal back to the central office.²⁸ Indeed, the FCC has found that "the plug-in ADLU card is an indispensable component for providing ADSL service through the manufacturer's NGDLC system;..."²⁹ Different line cards offer different DSL functionalities and quality of service (QoS) guarantees. The line card is necessary to access the NGDLC loop UNE and to enable the CLEC to provide its desired services over the loop.

²⁶ 47 C.F.R. § 51.317(c).

²⁷ See TR 683, 8-25; 684, 1-25; 685, 1-4; 842, 15-25; 843, 1-25; 844, 1-25; 845, 1-25; 846, 1-25; 847, 1-25; 848, 1-25 and 849, 1-13 (Zulevic).

²⁸ Project Pronto Order at ¶ 14.

²⁹ Project Pronto Order at ¶ 14.

Although a line card provides DSLAM functionality, and although Qwest claims to permit CLECs to collocate “DSLAMs” at its remote terminals, Qwest nonetheless flatly refused CLECs the ability to collocate the line card, even where technically feasible. Instead, Qwest believes that CLECs should be required to collocate a much-larger DSLAM – a device that takes up more space, is more expensive to buy and operate, and draws more power – despite the fact that the similar functionality is contained on a much smaller piece of equipment. The installation of other technically feasible line cards would support the other advanced services that CLECs need to provide to differentiate their products in a competitive market.

With regard to technical feasibility, as discussed above, the Illinois Commission recently ordered SBC to permit CLECs to collocate line cards at NGDLC facilities.³⁰ Under FCC rules, this decision establishes a rebuttable presumption that such collocation is technically feasible in Arizona.³¹

As set forth more fully above, it is imperative that this Commission require that Qwest (1) provide unbundled access to all NGDLCs in its network; (2) provide unbundled access to all remote DSLAMs in its network; and (3) permit the collocation of DSL line cards at Qwest remote terminals. Absent such requirements, Arizona citizens will be deprived of any competitive choice in xDSL services.

III. ARGUMENT: LINE SHARING

A. Qwest’s Present Performance Fails To Satisfy the § 271 Competitive Checklist (AIL LS-1 and LS-3).

Throughout the § 271 proceedings on emerging services, Qwest has focused exclusively on the terms and conditions relating to line sharing contained in the SGAT in

³⁰ *Illinois Order* at p. 27.

support of its argument that it has met its burden of proof under § 271. Qwest's SGAT, however, is only one aspect of satisfying the competitive checklist. Rather, it is an absolute prerequisite to the satisfaction of the § 271 competitive checklist that Qwest demonstrate "its present compliance with the statutory conditions for entry."³²

Qwest has failed to demonstrate that it is currently complying with its obligations under the Act. For example, during the January 29-February 2, 2001 workshop on emerging services, Covad provided compelling testimony that Qwest regularly failed to circulate among its central office technical personnel an internal manual for the proper method to "lift and lay" and cross connect tie cables for line share orders.³³ Indeed, Covad personnel often had to instruct Qwest's own CO technicians in the proper method to place cross connects.³⁴

Compounding Qwest's apparent inability to properly train its work force to provision line shared loops is its regular failure to perform the test its own internal manual requires.³⁵ As a consequence, Covad experienced several orders where it attempted to turn up service at a customer's premise only to learn that there were load coils on the loop – which would have been uncovered had Qwest followed its manual when provisioning and testing Covad's line share orders.³⁶

The anti-competitive impact of Qwest's actual practice and apparent policy in provisioning Covad's line share orders is self-evident. Covad's orders are not provisioned properly, which results in end user frustration, damage to Covad's reputation,

³¹ *Collocation Order* at ¶¶ 8, 45 ("[a] collocation method used by one incumbent LEC or mandated by a state commission is presumptively technically feasible for any other incumbent LEC.").

³² *Application by Bell Atlantic New York Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York*, CC Docket No. 99-295, Mem. Op. and Order, FCC 99-404 (1999), ¶ 37.

³³ TR 690, 10-23 (Hughes).

³⁴ *Id.* (Hughes).

³⁵ TR 691, 8-25; 692, 1-3 (Hughes).

³⁶ *Id.* (Hughes).

and a loss of revenue. Covad also is forced to incur significant time and labor costs because it must roll a truck not only to the end user's premises, but also to the central office to verify that the splitter wiring and testing procedures were done correctly in the first place.³⁷

Covad suggested a simple, expedient and cost-efficient method to resolve the vast majority of the issues created by Qwest's failure to properly train its personnel and to require that such personnel use the internal manual when provisioning Covad's line share orders. Specifically, Covad suggested that Qwest perform a data continuity test for Covad's line share orders, a test that Qwest currently performs for its own Megabit DSL orders.³⁸ Covad also offered to provide Qwest with the equipment necessary to perform the data continuity test.³⁹

Qwest refused to perform the data continuity test. Qwest's sole basis in doing so appeared to be its reliance on the fact that SBC did not perform a data continuity test and yet still had its § 271 application for Kansas and Oklahoma approved.⁴⁰

This Commission should not be hoodwinked by Qwest's "it must be okay" argument. As an initial matter, SBC is an aberration; as Covad pointed out, both Bell South and Verizon perform a similar test that accomplishes the same objective as a data continuity test.⁴¹ More importantly, the FCC made clear in the Kansas and Oklahoma order that § 271 approval was determined on a case by case basis, and not on any one particular fact.

³⁷ TR 693, 4-14 (Zulevic); TR 719 2-6 (Zulevic).

³⁸ TR 693, 15-23 (Zulevic).

³⁹ TR 693, 24-25; 694, 1-2; 718, 14-25; 719, 1-6 (Hughes, Zulevic).

⁴⁰ TR 716, 1-9 (Steese, Zulevic); 721, 5-13 (Steese). Qwest also appears to rely on the argument that it should be relieved of demonstrating § 271 compliance on this particular performance issue because it was raised in the line sharing summit before the FCC. As Qwest conceded, however, the summit is not a formal rulemaking that will result in an authoritative pronouncement, but rather a "best practices" forum to facilitate better performance by ILECs. TR 734, 4-9 (Steese). Moreover, Qwest has made no commitment to adhere to the conclusions reached by the FCC as a result of the summit. *Id.*, 17-18.

The severity of this problem may not be underestimated. Line sharing was implemented over a year ago; Covad proposed an easy and simple solution, and yet Qwest still is unable to properly provision otherwise simple line share orders for CLECs.⁴² Qwest thus has created a significant barrier to market entry in the State of Arizona, thereby depriving Arizona residents of a choice among xDSL providers. This Commission must act affirmatively to halt Qwest's anti-competitive practices. Until such time as that conduct ceases, this Commission should not approve Qwest's § 271 application.

B. Qwest's Proposed Line Sharing Interval Is Too Long. (SGAT, Exhibit C; AIL LS-4).

The work necessary to provision a line shared loop is minimal; no work must be done in connection with the outside plant (except under very limited circumstances), minimal work is required inside the CO, and no administrative work is required since the cable pair and central office equipment information already has been ascertained.⁴³ Indeed, all that is required is a simple "lift and lay," pursuant to which one cross connect is replaced with two (and, on occasion four), using the same cable bearer and switch office equipment.⁴⁴

Despite the apparent simplicity of the process, Qwest nonetheless insists on the same five (5) business day interval for both stand alone and line shared loops. Qwest's argument turns on the facile contention that the full five business days are necessary because "Qwest must perform numerous other order entry, assignment and provisioning functions."⁴⁵

⁴¹ TR 715, 2-22; 716, 10-20 (Zulevic).

⁴² TR 741, 4-14 (Zulevic).

⁴³ TR 685, 11-18 (Zulevic).

⁴⁴ *Id.*, 19-25 (Zulevic).

⁴⁵ Stewart Reb., p. 16.

Qwest's argument rings hollow, when set against the fact that line sharing has been in place for over one year and Qwest has had the opportunity to resolve and, potentially automate, the line share provisioning process. More importantly, it stands in stark contrast to the intervals set by other ILECS, including SBC, Verizon, and Bell South, which all have three day intervals for line share orders.⁴⁶

Qwest also raises the feeble argument that a five (5) business day interval is appropriate because that is the parity interval for Qwest's Megabit DSL service.⁴⁷ This Commission, however, is not bound by a purported "parity" standard.⁴⁸ Instead, the Commission should adopt an interval that, consistent with the Act, facilitates the deployment of advanced services in the State of Arizona.

In its Comments and testimony, Covad suggested that Qwest adhere to a graduated line sharing interval, beginning with a three day interval and then dropping down to a one day interval after six months. Because a one day interval would facilitate the entry of CLECs into the xDSL market in the State of Arizona, this Commission should follow the lead of other states, like Illinois, that mandate a one day interval⁴⁹ for line share orders.

C. Qwest's SGAT Permits It To Unilaterally Impede CLECs' Rights To Mount Splitters On the ICDF (SGAT § 9.4.2.3.1; AIL LS-5).

SGAT § 9.4.2.3.1 states that the POTS splitter will be installed either on a relay rack or a main distribution frame under two circumstances: (1) where an ICDF is not available; or (2) the CO has less than 10,000 lines. As Covad pointed out in its Comments, Qwest has permitted other CLECs to mount their splitters on the MDF in

⁴⁶ TR 808, 3-6 (Hsiao).

⁴⁷ TR 806, 16-21 (Stewart).

⁴⁸ Note also that a parity interval is simply not appropriate here. Because there is a significant difference between the provision of Megabit DSL service, which is high speed internet access plus IP, versus the provision simply of a cross connect – without the attendant provision of high speed internet access and IP, the "parity" interval has no applicability here. See TR 815, 2-15 (Zulevic).

offices with more than 10,000 lines, but has unfairly refused to accord Covad the same option.⁵⁰ Setting aside the issue of Qwest's discriminatory treatment of Covad, a more problematic consequence of Qwest's proposed SGAT language is the fact that it reposes in Qwest the power to unilaterally, and without warning, alter Covad's rights to mounting a splitter on the MDF simply by redesignating an MDF as an ICDF.⁵¹

Covad's concern is not without basis. As Mr. Zulevic testified, Qwest has taken this precise step previously:

The problem arises in that we don't know what [Qwest's] designation is for a particular frame at a particular point in time. [A] frame was redesignated as an ICDF, apparently, after another CLEC asked to have this type of splitter placed on it.⁵²

Because Qwest has demonstrated its propensity to abuse the discretion implicit in SGAT § 9.4.2.3.1, this Commission should affirmatively prevent Qwest from acting in such an anti-competitive manner. Qwest should be required to amend this provision to eliminate the 10,000 line limitation.

D. Qwest Improperly Limits Line Sharing To Copper Loops. (SGAT § 9.4.1.1; AIL LS-9).

The FCC made clear in the *Line Sharing Reconsideration Order* that “the requirement to provide line sharing applies to the entire loop, even where the incumbent has deployed fiber in the loop (e.g., where the loop is served by a remote terminal).”⁵³ Thus, despite its use of the word “copper” in the *Line Sharing Order*, the FCC made clear that “use of the word ‘copper’ in section 51.319(h)(1) was not intended to limit an incumbent LEC's obligation to provide competitive LECs with access to the fiber portion

⁴⁹ TR 808, 6-8 (Hsiao).

⁵⁰ See also TR 687, 16-25; 688, 1-13; 819, 3-10 (Zulevic) (Qwest refused to permit Covad to place a splitter on the MDF in COs with more than 10,000 lines).

⁵¹ TR 687, 23-25; 688, 1-13 (Zulevic).

⁵² TR 688, 3-9; see also TR 819, 11-22 (Zulevic).

⁵³ *Line Sharing Reconsideration Order*, ¶ 10.

of a DLC loop for the provision of line-shared xDSL services.”⁵⁴ As the FCC explained, this clarification was necessary in order to prevent incumbent LECs from closing off competition by migrating its service to fiber:

In the absence of this clarification, a competitive LEC might undertake to collocate a DSLAM in an incumbent’s central office to provide line-shared xDSL services to customers, only to be told by the incumbent that it was migrating those customers to fiber-fed facilities and the competitor would now have to collocate another DSLAM at a remote terminal in order to continue providing line-shared services to those same customers. If our conclusion in the Line Sharing Order that incumbents must provide access to the high frequency portion of the loop at the remote terminals as well as the central office is to have any meaning, then competitive LECs must have the option to access the loop at either location.⁵⁵

True to the FCC’s concern, Qwest expressly limits line sharing to the “copper portion of the loop.” SGAT § 9.4.1.1. Astonishingly enough, Qwest claims that its “copper only” definition of line sharing is consistent with the *Line Sharing Reconsideration Order*, arguing that paragraph 12 “qualifies” the unambiguous language of the earlier paragraphs, and thus permits the limitation to line sharing over the copper loop. Qwest’s argument is without merit and should be rejected.

A CLEC is entitled to “any technically feasible method of obtaining interconnection,” including “physical collocation and virtual collocation at the premises of an incumbent LEC.”⁵⁶ Nowhere, however, has Qwest provided any evidence that line sharing over a fiber fed loop is not technically feasible. To the contrary, as discussed more fully above, line sharing over a fiber fed loop – via a “plug and play” card – is presumptively feasible and thus should be ordered by this Commission.⁵⁷

⁵⁴ *Id.*

⁵⁵ *Id.*, ¶ 11.

⁵⁶ 47 C.F.R. § 51.321(a), (b)(1), 323(a).

⁵⁷ Qwest will undoubtedly argue that such an approach is not proper because it is more of a packet switching issue than a line sharing issue. Acceptance of such an argument elevates form over substance. To the extent that a particular type of packet switching technology provides a technically feasible and cost-

As set forth more fully above, this Commission has the authority, under the Act⁵⁸ and FCC rules⁵⁹, to expand Qwest's unbundling obligations beyond those required by the FCC and "to impose additional, pro-competitive requirements consistent with the national framework established in this order."⁶⁰ Therefore, it is clear that the FCC welcomes this Commission's efforts to enact additional regulations that it finds warranted to promote competition and the deployment of advanced services in Arizona.

IV. CONCLUSION

The remote terminal access and line sharing over fiber loop provisions contained in the SGAT are insufficient to spur competitive entry into Arizona. The entry options proposed by Qwest (physical collocation of a DSLAM at the remote terminal or access to parallel loops) are simply insufficient and unrealistic methods of competitive entry. Without competitive entry, Arizona citizens will be denied the key benefits of competitive choice – higher quality of service and lower prices. Under Qwest's proposal, only Qwest will be in a position to realize the economies of scale, scope and density needed to have this type of DSL deployment make sense. As discussed above, Qwest's ability to wall off entire Arizona neighborhoods and towns could impact well beyond those towns and throughout the state – especially in the residential market.

The Commission should not put all of its telecommunications eggs into one basket. Covad and Rhythms have proposed an option of NGDLC access that would, in Covad's and Rhythms' opinion, provide Arizona citizens a competitive option. Covad and Rhythms respectfully urge the Commission to take the appropriate and necessary steps in this proceeding to provide Arizona citizens that option.

efficient method of line sharing over fiber, that technology should be included in – or at least not specifically excluded by -- the SGAT.

⁵⁸ 47 U.S.C § 251(d)(3).

⁵⁹ 47 C.F.R § 51.317(d).

Covad also encourage this Commission to withhold § 271 approval until Qwest corrects the serious and on-going performance problems identified by Covad. Until such problems are completely and finally corrected, significant barriers to market entry by CLECs will continue to exist.

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Respectfully submitted,

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⁶⁰ *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Third Report and Order, 14 FCC Rcd. 20912, at ¶ 159 (1999) ("Line Sharing Order").

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